

In the Abstract

Please amend the Abstract to read as follows:

**ABSTRACT OF THE DISCLOSURE**

**Medical Gas Recirculation System**

A medical device (103) is supplied (105) with a gas mixture from a higher pressure section of a main circuit (102) in which medical gas recirculates through the higher pressure section and a lower pressure section. Decontaminated spent gas is returned to the lower pressure section of the main circuit. ~~Pressure~~ Constant pressure in the higher pressure section is maintained by a pressure maintaining valve (141) and gas flow in the main circuit is maintained by a volume regulator (145) in the lower pressure section. The composition of the recirculating gas mixture is maintained by addition of respective feed gases in response to concentration and/or volume variation measurement. The method has particular application to the feed of a binary oxygen/xenon mixture to a cardiopulmonary bypass oxygenator or an artificial ventilator.